

**What Is Claimed Is:**

1. *Bacillus amyloliquefaciens* KTGB0202 (accession number: KCTC 10564BP) having an antifungal activity against plant  
5 pathogenic fungi and an inhibitory effect against plant virus infection.

2. The *Bacillus amyloliquefaciens* KTGB0202 of Claim 1,  
wherein the plant pathogenic fungus is one selected from powdery  
10 mildew, *Cladosporium* sp., *Colletotrichum* sp., *Phytophthora* sp.,  
*Botrytis cinerea*, *Rhizoctonia solani*, *Fusarium* sp., *Alternaria*  
sp., *Magnaporthe grisea*, *Puccinia recondita*, *Corticium sasakii*,  
and *Candida* sp.

15 3. The *Bacillus amyloliquefaciens* KTGB0202 of Claim 2,  
wherein the powdery mildew is one selected from *Sphaerotheca*  
*fuliginea* of gourd plants, *S. humuli* of strawberry, *S. pannosa*  
of rose, *Erysiphe tabacina* of tobacco, *Leveillula taurica* and  
*Erysiphe cichoracearum* of Solanaceae vegetables, *Leveillula*  
20 *heraclei* of carrots, and *Blumeria graminis* of barley.

4. The *Bacillus amyloliquefaciens* KTGB0202 of Claim 1,  
wherein the plant virus is tobacco mosaic virus (TMV).

25 5. A method for controlling plant pathogens using the  
*Bacillus amyloliquefaciens* KTGB0202 culture broth of Claim 1.

6. A antifungal substance KTGB0202-AF01 showing antifungal  
activity, which is obtained by extraction and purification from  
30 the *Bacillus amyloliquefaciens* KTGB0202 of Claim 1.